What is claimed is:

1. An attenuated *Shigella* strain wherein said *Shigella* is able to enter a cell and die once inside the cell.

2. An attenuated *Shigella* strain according to claim 1,wherein said strain is *S. flexneri*.

3. The attenuated *Shigella* strain according to claim 2, wherein said strain is 15D given ATCC accession number ATCC 55710.

4. A method for producing an attenuated *Shigella* strain, said method comprising inactivating an aspartate β-semialdehyde dehydrogenase gene present in said *Shigella* .

5. A method for producing an attenuated *Shigella* strain according to claim 4 wherein said inactivation is by mutation.

6. A method for producing an attenuated *Shigella* strain according to claim 4 wherein said attenuated *Shigella* is able to enter a cell but dies once inside the cell.

7. A vaccine for reducing in an individual disease symtoms caused by *Shigella* , said vaccine comprising:

(i) attenuated *Shigella*; and

(ii) a pharmaceutically acceptable excipient.

8. A vaccine for reducing in an individual disease symtoms according to claim 7, wherein said *Shigella* is *S. flexneri* .

9. A vaccine for reducing in an individual disease symptoms caused by *S. flexneri* according to claim 8, wherein said attenuated *S. flexneri* is 15D given ATCC accession number ATCC 55710.

10. A vaccine for reducing in an individual disease symptoms caused by *Shigella* according to claim 7, wherein said attenuated *Shigella* is further inactivated.

11. A method for reducing in an individual disease symptoms caused by *Shigella* comprising administering to said individual attenuated *Shigella* in a pharmaceutically acceptable excipient, in an immunologically effective dose.

12. A method for reducing in an individual disease symtoms caused by *Shigella* according to claim 11, wherein said *Shigella* is *S. flexneri*.

13. A method for reducing in an individual disease symtoms caused by *Shigella* according to claim 11, wherein said attenuated *Shigella* is further inactivated.

14. A delivery vehicle for the delivery of DNA to a cell, said vehicle comprising attenuated *Shigella* wherein said DNA is introduced.

15. A delivery vehicle for the delivery of DNA to a cell according to claim 14, wherein said *Shigella* is *S. flexneri*.

16. A delivery vehicle for the delivery of DNA to a cell according to claim 14, wherein said cell is a cell of an intestinal mucosal epithelium cell.

17. A delivery vehicle for the delivery of DNA to a cell according to claim 14, wherein said *Shigella* is *S. flexneri*.

18. A delivery vehicle for the delivery of DNA to a cell according to claim 17, wherein said *S. flexneri* is 15D given ATCC accession number ATCC 55710.

19. A delivery vehicle for the delivery of DNA to a cell according to claim 14, wherein said attenuated *Shigella* is further inactivated.

20. A delivery vehicle for the delivery of an antigen to a cell comprising attenuated *Shigella* into which said antigen is introduced.

21. A delivery vehicle for the delivery of an antigen to a cell according to claim 20, wherein said *Shigella* is *S. flexneri*.

22. A delivery vehicle for the delivery of an antigen to a cell according to claim 21, wherein said *S. flexneri* is 15D.

23. A delivery vehicle for the delivery of an antigen to a cell according to claim 20, wherein said attenuated *Shigella* is further inactivated.

24. A method for oral immunization of an individual against *Shigella* comprising orally administering to said individual an immunologically effective amount of attenuated *Shigella* in a pharmaceutically acceptable excipient.

25. A method for oral immunization of an individual against *Shigella* according to claim 24, wherein said *Shigella* is *S. flexneri*.

26. A method for oral immunization of an individual againt *Shigella* according to claim 25, wherein said *S. flexneri* is 15D.

27. A method for oral immunization of an individual against *Shigella* according to claim 24, wherein said attenuated *Shigella* is further inactivated.

28. A method for delivering DNA to a cell, said method comprising:

(i) introducing said DNA into attenuated *Shigella*; and

(ii) administering said *Shigella* to said cell.

29. A method for delivering DNA to a cell according to claim 28, wherein said *Shigella* is *S. flexneri*.

30. A method for delivering DNA to a cell according to claim 29, wherein said *S. flexneri* is 15D.

31. A method for delivering DNA to a cell according to claim 28, wherein said cell is a cell of a mucosal epithelium.

32. A method for delivering DNA to a cell according to claim 31, wherein said mucosal epithelium is intestinal mucosal epithelium.

33. A method for delivering DNA to a cell according to claim 28, wherein said attenuated *Shigella* is further inactivated.

34. A method for delivering an antigen to a cell comprising:

(i) introducing said antigen into an attenuated *Shigella*; and

(ii) administering said *Shigella* to said cell.

35. A method for delivering an antigen to a cell according to claim 34, wherein said *Shigella* is *S. flexneri*.

36. A method for delivering an antigen to a cell according to claim 35, wherein said *S. flexneri* is 15D given ATCC accession number ATCC 55710.

37. A method for delivering an antigen to a cell according to claim 34, wherein said cell is a cell of a mucosal epithelium.

38. A method for delivering an antigen to a cell according to claim 37, wherein said mucosal epithelium is intestinal mucosal epithelium.

39. A method for delivering an antigen to a cell according to claim 34, wherein said attenuated *Shigella* is further inactivated.

40. A method for detecting *Shigella* infection, said method comprising:

(i) coating a surface with attenuated *Shigella* or its components;

(ii) contacting said coated surface with serum or tissue sample from an individual suspected of having said infection;and

(iii) detecting the presence or absence of the infection by detecting the presence or absence of a complex formed between said *Shigella* and immune response specific therefor present in said sample.

41. A diagnostic kit for the detection of *Shigella* infection, said kit comprising attenuated *Shigella*, and ancillary reagents suitable for use in detecting the presence of immune response to said *Shigella* in a sample.

42. A diagnostic kit for the detection of *Shigella* according to claim 41, wherein said *Shigella* is *S. flexneri*.

43. The diagnostic kit according to claim 42, wherein said *S. flexneri* is 15D given ATCC accession number ATCC 55710.

44. A method for the delivery of functional nucleic acids into a cell using bacteria comprising:

(i) introducing said nucleic acids into an attenuated bacteria; and

(ii) administering said bacteria to said cell.

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